

FORM PTO-1390  
(REV. 01-2003)

US DEPARTMENT OF COMMERCE PATENT &amp; TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER  
124715**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**U.S. APPLICATION NO. (If known, see 37 CFR 1.5)  
New U.S. National Stage of PCT/JP03/014571  
**10/542430**INTERNATIONAL APPLICATION NO.  
PCT/JP03/014571INTERNATIONAL FILING DATE  
November 17, 2003PRIORITY DATE CLAIMED  
January 16, 2003

## TITLE OF INVENTION

METHOD OF CONCENTRATING AND REMOVING HARMFUL SUBSTANCE USING DOUBLE-STRANDED DNA AND ADSORBENT AND APPARATUS THEREFOR

## APPLICANTS FOR DO/EO/US

Xiang Dong LIU; Masaji MATSUNAGA; Norio NISHI

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☒ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☒ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
  - c. ☐ The International Application was filed in English.
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventors (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11 to 20 below concern document(s) or information included:**

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A preliminary amendment.
14. ☒ An Application Data Sheet under 37 CFR 1.76.
15. ☐ A substitute specification.
16. ☒ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13~~ter~~.2 and 37 CFR 1.821 - 1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☒ Other items or information: Transmittal and Statement of Power of Attorney; International Search Report

U.S. APPLICATION NO. (if known, see 37 C.F.R. 1.5) New U.S. National Stage of PCT/JP03/014571 <b>0-942430</b>		INTERNATIONAL APPLICATION NO. PCT/JP03/014571		ATTORNEY'S DOCKET NUMBER 124715	
21. <input checked="" type="checkbox"/> The following fees are submitted:				<b>CALCULATIONS      PTO USE ONLY</b>	
<b>BASIC NATIONAL FEE (37 CFR 1.492(a)):</b> ..... \$ 300.00				\$300	
<b>SEARCH FEE (37 CFR 1.492(b)(1)-(3)):</b>				\$400	
International preliminary examination report or written opinion prepared by the USPTO as IPEA or ISA and favorable as to novelty, inventive step, and industrial applicability for all claims presented in the application entering the national stage ..... \$ 0.00					
International search fee (37 CFR 1.445(a)(2)) paid to USPTO as ISA ..... \$ 100.00					
International search report provided to USPTO no later than the time at which the search fee is paid ..... \$ 400.00					
All situations not provided for above ..... \$ 500.00					
<b>EXAMINATION FEE (37 CFR 1.492(c)(1)-(2)):</b>				\$200	
International preliminary examination report or written opinion prepared by the USPTO as IPEA or ISA and favorable as to novelty, inventive step, and industrial applicability for all claims presented in the application entering the national stage ..... \$ 0.00					
All situations not provided for above ..... \$ 200.00					
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
TOTAL PAGES OF APPLICATION OVER 100 ( - 100)	÷ 50	= †	x 250 =	\$	
†round up to next integer					
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
TOTAL CLAIMS	6- 20	= 0	x 50.00 =	\$	
INDEPENDENT CLAIMS	1- 3	= 0	x 200.00 =	\$	
MULTIPLE DEPENDENT CLAIM(S)(if applicable)			+ 360.00 =	\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$900	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.				\$	
<b>SUBTOTAL =</b>				\$900	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
<b>TOTAL NATIONAL FEE =</b>				\$900	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$	
<b>TOTAL FEES ENCLOSED =</b>				\$900	
				Amount to be refunded:	\$
				charged:	\$
a. <input checked="" type="checkbox"/> Check No. 168767 in the amount of \$900.00 to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$_____ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 15-0461. A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. <b>Credit card information should not be included on this form.</b> Provide credit card information and authorization on PTO-2038.					
<b>NOTE:</b> Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status. <b>SEND ALL CORRESPONDENCE TO:</b> OLIFF & BERRIDGE, PLC Customer Number: 25944					
Date <u>July 15, 2005</u>			NAME: James A. Oliff REGISTRATION NUMBER: 27,075  NAME: Eric. D. Morehouse REGISTRATION NUMBER: 38,565		

**PATENT APPLICATION**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Xiang Dong LIU et al.

Application No.: New U.S. Patent Application

Filed: July 15, 2005

Docket No.: 124715

For: METHOD OF CONCENTRATING AND REMOVING HARMFUL SUBSTANCE USING  
DOUBLE-STRANDED DNA AND ADSORBENT AND APPARATUS THEREFOR

**TRANSMITTAL OF POWER OF ATTORNEY AND  
STATEMENT UNDER 37 CFR § 3.73(b)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith is a Power of Attorney from the Assignee.

In compliance with 37 CFR §3.73(b), the undersigned hereby states that NISSEI BIO  
CO., LTD. is the assignee of the entire right, title and interest in the patent application identified  
above by virtue of an assignment from the inventors of the patent application identified above. A  
copy of the assignment is attached hereto]

The undersigned is authorized to act on behalf of the assignee.

In accordance with 37 CFR §1.36(a), submission of this Power of Attorney revokes any  
powers of attorney previously given.

**ALL CORRESPONDENCE IN CONNECTION WITH THIS APPLICATION SHOULD  
BE SENT TO OLIFF & BERRIDGE, PLC, CUSTOMER NO. 25944, TELEPHONE  
(703) 836-6400.**

Respectfully submitted,



Eric D. Morehouse  
Registration No. 38,565

JAO:EDM/cqc

Date: July 15, 2005